

Fish Consumption Advisory for Trout from Silver Creek, Summit County, Utah

The Utah Department of Environmental Quality (UDEQ), Utah Department of Health and the Summit County Health Department are advising the public of elevated arsenic levels in the meat of trout from Silver Creek in Summit County. The advisory recommends that adults limit their consumption of trout taken from Silver Creek to no more than two 8-ounce servings per month. Pregnant women, nursing mothers and children under age 12 should not eat more than one 4-ounce serving per month. This advisory is based on the agencies' review of fish tissue taken from Silver Creek.

Samples from trout taken from the creek were tested for 25 metals, including mercury, arsenic and lead. The data were assessed and the advisory issued based on risk-assessment methods developed by the U.S. Environmental Protection Agency (EPA). Results of the assessment show that eating more than two servings per month (for adults) of these fish over a long period of time could result in an intake of arsenic that exceeds the EPA carcinogen screening value for arsenic. Although no known illnesses have been associated with consuming trout from the Silver Creek, studies based on long-term consumption have identified arsenic as a known human carcinogen. Exposure to high levels of arsenic has been linked with gastrointestinal problems, anemia and liver damage.

It is important to note that the health risk associated with eating the contaminated fish is based on long-term consumption and not tied to eating fish occasionally.

Fish ingest contaminants from the water they live in and the food they eat. Older, larger, predatory fish tend to have more arsenic than younger, smaller fish because these contaminants build up in fish over time. Because arsenic is bound in the muscle tissue of organisms, it cannot be removed or significantly reduced by methods such as frying, baking, grilling, smoking or other processing activities.

Arsenic is a naturally occurring element and exists at low levels throughout our environment. The arsenic in Silver Creek is believed to be from both natural and mining-related sources associated with mineral deposits in the Silver Creek watershed. A recently completed water quality study by UDEQ (April 2004) has identified several source areas from historic mining activities that are contributing metals to Silver Creek. A local watershed committee is facilitating clean up work to address metals contamination in Silver Creek. The clean up is expected to take several years.

Fish consumption advisory signs will be posted at access points along the creek, primarily along the rail trail that parallels Silver Creek. In addition, information about the advisory will be distributed at kiosks at trailheads along the rail trail and at the information center in Park City. The agencies will continue to monitor contaminant levels of fish in the watershed and will update the advisory, as needed, based on additional information.

It is also important to consider the benefits of eating fish as part of a balanced diet. Fish are a good source of readily digestible protein. They are low in fat and sodium, and the unique types of fats found in fish are believed to provide cardiovascular benefits to humans.

This investigation was conducted in cooperation with the following agencies:

- Summit County Health Department
- Utah Department of Health
- Utah Department of Natural Resources, Division of Wildlife Resources
- Utah Department of Natural Resources, Division of Parks & Recreation
- Utah Department of Environmental Quality, Division of Water Quality
- Utah Department of Environmental Quality, Division of Environmental Response & Remediation
- U.S. Geological Survey
- U.S. Fish & Wildlife Service

Silver Creek Summit County, Utah

Weber River Basin, Utah

